which the irregularities take—the form of widely extended angles, for the following reasons: this form represents a morbid entity which may be present in all stages of the disease. It is also the most frequent, constituting 79 per cent. of all syphilitic irregularities of the pupil. It also gives the minimum percentage of failures in determining the syphilitic origin of pupillary irregularities; of 100 patients affected with this form of irregularity, syphilis was certainly present in 74 and possibly in 89. He is of the opinion that this form of irregularity, particularly when bilateral, as an almost certain symptom of syphilis so that when present the serological reaction should always be sought.

Raising Ocular Tension.—LAGRANGE (*Annal. d'Oculist.*, July, 1920, p. 447) has attempted to raise the tension in eyes affected with high myopia and detachment of the retina. He has found in 17 of 52 myopes hypotension reaching 5 mm. Hg. After treatment normal tension supervened lasting several years in two-thirds of those operated upon. His procedure seeks to abolish the conjunctival meshes opposite the angle of filtration. This can be accomplished by repeated injection of cyanide or by a technic which he advocates and which consists in the destruction of the zone of conjunctiva surrounding the cornea adjacent to the anterior chamber, by cauterizing the tissues with the galvanocautery to bring about reaction and the production of a fibrous tissue. Hypertension usually supervenes the following day and lasts three or four days to give place to a renewed diminished tension, lasting a month, to be followed at the end of three or four months by increased pressure which finally becomes about normal. Fifteen cases of retinal detachments thus treated were cured.

Relation of Diseases of the Eye to Those of the Nose and Sinuses.—STEIGER (*Med. Klin.*, 1920, No. 9, p. 221) calls attention to the multiform and frequently intimate relations between diseases of the eye and those of the nose and accessory sinuses. Acute and chronic catarrhs of the conjunctiva often point to changes within the nose, which latter depend upon mechanical interference with normal nasal respiration, especially hypertrophy of the inferior turbinate. Scrofulous affections of the cornea and conjunctiva almost invariably indicate concomitant adenoid disease. The author believes that in such cases the symptoms are not simply concomitant, but that the nasal affection is to be regarded as the primary cause and as aggravating the ocular conditions; when the local symptoms of the nasal process are relieved, the ocular affection pursues a more favorable course. Acute inflammatory diseases of the orbit are due, in the majority of cases, to direct contact or conduction from an acute inflammatory process in the nasal fossæ. Frontal sinus, antrum, anterior and posterior ethmoidal cells and the mastoid may become involved whenever the narrow outlets of the nasal fossæ have been closed by disease, particularly acute swelling. Treatment consists accordingly in endo measures looking to prompt drainage of the diseased nasal fossæ. In chronic conditions, on the other hand, an independent focus of disease is frequently present in the sinuses, which is capable of further extension through erosion of the bones. Rational therapy demands removal of the primary focus of the affected sinus. Diseases of the lacrimal canal and sac may be excited by swelling in the region of the inferior turbinate, whenever such swellings extend to and close the nasolacrimal outlet; dilatation of the latter also, as in ozena, may likewise cause disease of the lacrimal drainage apparatus through entrance of diseased products from the nose mechanically or by extension through continuity. The treatment in these cases is cure of the nasal affection. Dislocation of the globe by mucoceles and tumors are too well known to require special mention; the same is true of affections of the optic nerve. The possibility of reflex neuroses of the eye of nasal origin should also be borne in mind; proof of the rhinologic origin of cataract, glaucoma, etc., has not yet been furnished.

PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF
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Streptolysin.—Although the use of the blood-agar plate for the differentiation of alpha and beta hemolytic streptococci has become quite general, there has been a lack of uniformity of method and but little attempt at standardization. Impressed by the fact that the hemolytic zones surrounding colonies of the beta hemolytic streptococcus were wider and clearer on 10 per cent. sheep's blood-agar plates than on those prepared from similar concentrations of rabbit and human blood, De Kruif and Ireland (*Jour. Infect. Dis.*, 1920, xxvi, 285) have studied hemolysin production by these organisms on blood accessible to general use, in order to ascertain whether variations in suitability exist among these bloods and to determine their optimum concentration for maximum production. Beef-infusion broth was employed in all cases, being adjusted to a hydrogen-ion concentration of pH 7.8. The investigations included studies on human, rabbit, sheep and horse blood. Instead of following the previously described methods of titration of filtrates or whole cultures the authors titrated the supernatants of early broth cultures seeded with from eight to twenty-four-hour cultures of hemolytic streptococci against constant quantities of the washed erythrocytes. Extensive experimentation was carried out, the results being recorded by tables and graphs. It was found that lysin production reached its maximum for the strains studied at a very early period in the life of the serum broth culture. When the serum broth was inoculated with young (eight to twelve hours) cultures this peak was reached in from seven to eight hours. In older cultures the crest may be deferred to twelve hours. Heated serums were usually superior to unheated ones. Sheep and horse serum were superior in all concentrations to human and far superior to rabbit serum broth. From the results of their experiments the authors devised a new blood-agar plate with the idea of using the optimum serum concentration for maximal lysin production of a blood both efficient and available. Sheeps' blood